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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/801,639	03/09/2001	Byung Hyo Kim	P-195	3935
34610	7590	05/17/2005	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			SIDDIQI, MOHAMMAD A	
			ART UNIT	PAPER NUMBER
			2154	

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/801,639

Applicant(s)

KIM, BYUNG HYO

Examiner

Mohammad A. Siddiqi

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/14/2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 14-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 14-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-17 are presented for examination. Claims 11-13 have been cancelled. Claims 16 and 17 are new.
2. The amended abstract filed on 12/14/2005 has been entered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-10 and 14-17 rejected under 35 U.S.C. 103(a) as being unpatentable over Bartholomay et al. (6,539,023) (hereinafter Bartholomay) in view of Cookman et al. (6, 327,249) (hereinafter Cookman).

5. As per claim 1, Bartholomay discloses an inter-processor communication apparatus of a mobile communication system comprising:

a data-FIFO configured to store a receiving data from a master (12,fig 1, col 5, lines 1-10);

a slave-logic (24, fig 1) configured to control a writing operation of the receiving data for the data-FIFO (12,fig 1, col 5, lines 10-20) and count the length (col 5, lines 10-12) of the receiving data until an end-tap signal is inputted (col 5, lines 10-15;

a length-FIFO (16, fig 1, col 5, lines 10-13) directly connected to the slave-logic (16; fig 1, col 5, lines 10-13) and counted by the slave-logic (14,fig 1, col 5, lines 13-16); and

a CPU configured to continuously read (24,fig 1, col 5, lines 20-28) the data stored in the data-FIFO (12, fig1, col 5, lines 10-13) as much as the data read from the length-FIFO (16, fig 1, col 5, lines 10-13) when an interrupt signal is inputted (col 5, lines 20-28) from the slave-logic (24b, fig 1, col 5, lines 20-34).

Bartholomay failed to mention bus , reading continuously, cpu, configured to read and slave-logic. However, bus, reading continuously, cpu, configured to read and slave-logic are commonly used terms in the data communication art and these terms were anticipated in the Host controller and fig 1.

Cookman discloses configured to be directly coupled to a transmission bus, separately connected to the buffers (128, 118, 144,148, Fig 1A). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Bartholomay and Cookman.

The motivation would have been efficient use of FIFO buffers and in communication circuits or boards.

6. As per claim 2, Bartholomay discloses wherein the slave-logic counts the length (col 5, lines 10-12) of the receiving data until an end tag (col 5, line 29, interrupt) signal is inputted (col 5, lines 10-32).

7. As per claim 3, Bartholomay discloses the read data length is one frame data length (12,fig 1, col 5, lines 1-2).

8. As per claim 4, Bartholomay discloses the slave-logic stores the counted data length in the length-FIFO (16,fig 1, col 5, lines 10-13) when the end tag signal is inputted and outputs an interrupt signal to the CPU (col 5, lines 20-28).

9. As per claim 5, Bartholomay discloses the CPU continuously reads the data stored in the data-FIFO (12,fig 1, col 5, lines 10-13) by 1 byte unit as much as the data length stored in the length-FIFO (16,fig 1, col 5, lines 10-13).

10. As per claim 6, claim 6 is rejected for similar reasons as in claims 1-5, above.

11. As per claim 7, Bartholomay discloses the first and the second regions are FIFO (12 and 16, fig 1, col 5, lines 10-13).

12. As per claim 8, the claim is rejected for similar reasons as in claim 3, above.

13. As per claim 9, the claim is rejected for similar reasons as in claim 5, above.

14. As per claim 10, the claim is rejected for similar reasons as in claims 1-5, above.

15. As per claim 14, Bartholomay discloses wherein the counted data length of data is read in a single operation from the first region (col 5, lines 10-20).

16. As per claim 15, Bartholomay discloses the continuously reading comprises performing a single read operation to read the counted data length of data from the first region (col 5, lines 16-20).

17. As per claim 16, the claim is rejected for the same reasons as claim 1, above. In addition, Bartholomay disclose wherein when the master transmits a data, an end-tap (col 5, lines 29, interrupt) signal and a write signal to the slave-logic (col 5, lines 10-31):

The slave-logic outputs a write signal to the data-FIFO to store the receiving data and the end-tap signal in the data-FIFO (col 6, lines 18-26, HDLC equipment);

the slave-logic counts the receiving data, and after receiving the end-tap signal, the slave-logic outputs an interrupt signal to the CPU and outputs the counted data length together with a write signal to the length-FIFO (col 6, lines 15-26, HDLC equipment and host controller); and

the CPU reads the data length from the length-FIFO based on the interrupt and continuously reads the data stored in the data-FIFO up to the end-tap signal (col 6, lines 30-34).

18. As per claim 17, the claim is rejected for the same reason as claims 1, 10 and 16, above.

Response to Arguments

19. Applicant's arguments filed 12/14/2004 have been fully considered but they are not persuasive, therefore rejections to claims 1-10 and 14-15 is maintained.

20. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "a CPU separately connected to the length FIFO, the slave-logic and the data FIFO") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

21. The Examiner takes note the above Applicant's remark; however, Applicant's remark could not be imported into the claim. Therefore, the Examiner could not consider Applicant's remark.

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S. Patent 6,289,022

U.S. Patent 6,813,279

23. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

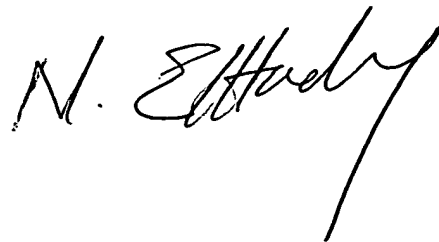
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad A. Siddiqi whose telephone number is (571) 272-3976. The examiner can normally be reached on Monday -Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A. Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MAS

A handwritten signature in black ink, appearing to read "N. Effendi", with a long, sweeping vertical stroke extending downwards from the end of the signature.